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The opinion in support of the decision being entered today is not binding precedent of the Board.

Paper 30 21

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17 June 2003

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

**FAXED**

ROLAND ANDREE,  
MARK WILHELM DREWES, MARKUS DOLLINGER  
and HANS-JOACHIM SANTEL

JUN 27 2003

Junior Party  
(Patent No. 6,251,828),

PAT. & T.M. OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

v.

RALF KLINTZ, PETER SCHAEFER,  
GERHARD HAMPRECHT, ELISABETH HEISTRACHER,  
HANS-JOSEF WOLF, KARL-OTTO WESTPHALEN,  
MATTHIAS GERBER, UWE KARDORFF, HELMUT WALTER,  
and KLAUS GROSSMANN

Senior Party  
(Application No. 09/733,554).

Patent Interference 105,039 (NAGUMO)

Before SCHAFER, TIERNEY, and NAGUMO, Administrative Patent Judges.

NAGUMO, Administrative Patent Judge.

DECISION ON ANDREE PRELIMINARY MOTION 1 AND FINAL JUDGMENT

Introduction

This interference concerns chemical compounds, substituted 3-phenyluracils, that are said to be particularly useful as

selective herbicides. That is, the compounds kill weeds, but are well-tolerated by broad-leaved crops.

On April 17, 2003, junior party Andree filed Preliminary Motion 1, seeking "judgment against Klintz on the ground that there is, ultimately, no interference-in-fact." (Paper 27 at 1.) As explained in detail post, we have interpreted Andree's motion as seeking determinations that Klintz lacks an adequate written description of the subject matter of claims 53-56, and that Andree's claims corresponding to Count 1 are patentably distinct from the remaining Klintz claims that correspond to Count 1. Andree's preliminary motion has been taken up on an expedited basis, and no other motions have been authorized. (Paper 23 at 8.) Senior party Klintz has not opposed Andree's motion.

For the reasons that follow, we GRANT Andree Preliminary Motion 1.

#### Findings of fact

The following list of enumerated findings as well as findings elsewhere in this opinion are supported by a preponderance of the evidence.

1. Party Andree is involved on the basis of its United States Patent 6,251,828 (the 828 patent).

2. Andree represents that its 828 patent issued from the national stage (filed January 23, 1998) of its international application, PCT/EP96/03223, filed July 22, 1996, which in turn derives from its German application 195-28-186.1, which was filed

August 1, 1995.

3. Andree has been accorded the benefit for priority of its PCT application and its German application.

4. Andree's real party in interest is Bayer AG.

5. Party Klintz is involved on the basis of its 09/733,554 application (the 554 application), which was filed on December 4, 2000.

6. Klintz represents that its 554 application, filed December 4, 2000, is a division of 08/774,722, filed January 3, 1997, which is a continuation of 08/211,067, filed March 18, 1994, which is a national stage of PCT/EP92/02088, filed September 10, 1992, which in turn is based on its German application P 41-31-038.1, which was filed on September 20, 1991.

7. Klintz has been accorded the benefit for priority of its 722 application, its 067 application, and its PCT application.

8. Klintz's real party in interest is BASF AG.

9. The claims of the parties are:

Andree: 1-6

Klintz: 1-7, 12, 13, 15, 16, 26-30, 36, 37, 39,  
40, 43-51, 53-56.

Count 1:

10. Count 1 is:

The composition of matter according to  
claim 1 of Andree, U.S. Patent No. 6,251,828

or

the composition of matter according to claim 1 of  
Klintz, U.S. Application Serial No. 09/733,554.

11. The claims of the parties that correspond to Count 1  
are:

Andree: 1-4, 6

Klintz: 1-5, 7, 12, 13, 15, 16, 26-28, 30, 36,  
37, 39, 40, 43, 45-51, 53-55.

12. Count 1 relates to a broad "genus" of compounds  
represented by Klintz claims 1-5, 7, 12, 13, 15, 16, 26-28, 30,  
36, 37, 39, 40, 43, and 45-51.

13. Count 1 also relates to a narrower "subgenus" of  
compounds represented by Klintz claims 53-55, and by Andree  
claims 1-4 and 6.

14. The claims of the parties that do not correspond to  
Count 1 are:

Andree: 5

Klintz: 6, 29, 44, 56.

Count 2:

15. Count 2 in this interference is:

The composition of matter according to claim 56 of  
Klintz, U.S. Application Serial No. 09/733,554.

16. The claims of the parties that correspond to Count 2  
are:

Andree: 5

Klintz: 56.

17. Count 2 relates to diazo-substituted 3-phenyluracils  
that are intermediates - i.e., they can be transformed - to many  
compounds within the genus and subgenus of compounds covered by  
Count 1.

18. The claims of the parties that do not correspond to  
Count 2 are:

Andree: 1-4, 6

Klintz: 1-7, 12, 13, 15, 16, 26-30, 36, 37, 39, 40,  
43-51, 53-55.

19. The claims of the parties that do not correspond to  
either Count 1 or Count 2, and hence that are not involved in  
this interference, are:

Andree: none

Klintz: 6, 29, 44.

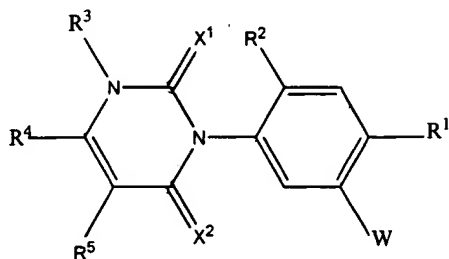
20. Klintz's claims 53-56 were "copied" from Andree's  
claims in order to provoke this interference. (Exhibit 2005 at

2, third paragraph, Klintz amendment, Paper 14 of the 554 application.)

The compounds

21. The genus compounds of Count 1 are represented by Klintz's formula (I), as defined in Klintz claim 1, which reads in relevant part:

A compound of formula I



where

X<sup>1</sup> and X<sup>2</sup> are each oxygen or sulfur;

W is  $-\text{CH}(\text{R}^8)-\text{CH}(\text{R}^9)-\text{CO}-\text{R}^{10}$   $-\text{C}(\text{R}^8)=\text{C}(\text{R}^9)-\text{CO}-\text{R}^{10}$   $-\text{C}(\text{R}^8)=\text{C}(\text{R}^9)-\text{CN}$

in which

\* \* \* \* \*

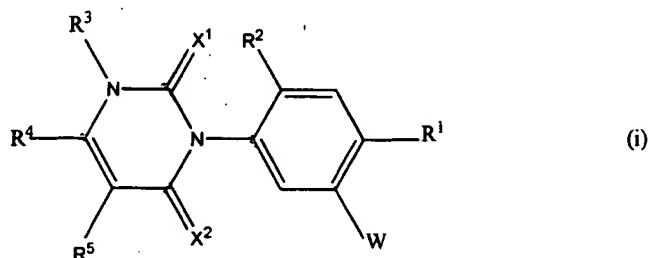
R<sup>1</sup> is halogen, cyano, nitro, or trifluoromethyl;

\* \* \*.

22. For the present motion, the critical substituents are the "para" (Andree R<sup>5</sup>; Klintz R<sup>1</sup>) and the "meta" (Andree R<sup>6</sup>; Klintz W) substituents of the phenyl ring. (The terms "para" and "meta" denote the positions on the phenyl ring relative to the N-containing uracil ring.)

23. The subgenus compounds of Count 1 are represented by Klintz formula (i), as defined in Klintz claim 53, which reads in relevant part as follows:

A compound of formula (i)



wherein

X<sup>1</sup> and X<sup>2</sup> are oxygen;

R<sup>5</sup> represents hydrogen, fluorine, chlorine, bromine or optionally fluorine- and/or chlorine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl;

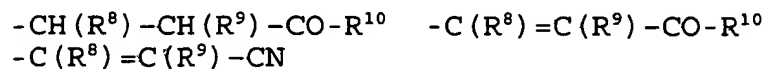
R<sup>4</sup> represents optionally fluorine- and/or chlorine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl;

R<sup>3</sup> represents hydrogen, amino, optionally cyano-, chlorine-, or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, or represents C<sub>3</sub>-C<sub>6</sub>-alkenyl or C<sub>3</sub>-C<sub>6</sub>-alkynyl;

R<sup>2</sup> represents hydrogen, fluorine or chlorine;

R<sup>1</sup> represents cyano; and

W represents one of the groupings below



in which \* \* \*.

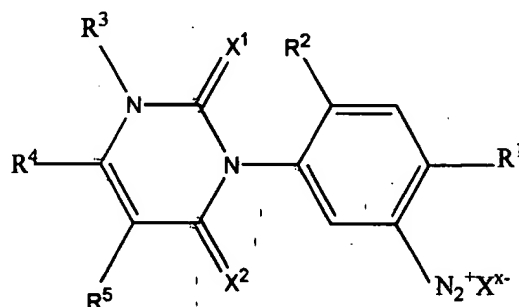
24. Klintz claims 54 and 55, which depend from claim 53, are drawn to a composition and a method of use, respectively.



They do not place further limitations on the substituents of the compound of formula (i).

25. The relevant intermediate compounds corresponding to Count 2 are defined by the formula in Klintz claim 54, which reads as follows:

A diazonium salt of formula



wherein

X<sup>1</sup> and X<sup>2</sup> are oxygen;

R<sup>5</sup> represents hydrogen, fluorine, chlorine, bromine or optionally fluorine- and/or chlorine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl;

R<sup>4</sup> represents optionally fluorine- and/or chlorine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl;

R<sup>3</sup> represents hydrogen, amino, optionally cyano-, fluorine-, chlorine-, or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, or represents C<sub>3</sub>-C<sub>6</sub>-alkenyl or C<sub>3</sub>-C<sub>6</sub>-alkynyl;

R<sup>2</sup> represents hydrogen, fluorine or chlorine;

R<sup>1</sup> represents cyano; and

X<sup>-</sup> represents halogen.

Andree's argument for no interference-in-fact

26. Andree argues that it has demonstrated, via testimony by Dr. Drewes, that its para-cyano compounds have unexpectedly superior selective herbicidal activity compared to the corresponding para-chloro compounds exemplified by Klintz.

(Paper 27 at 15-19.)

27. According to Andree, it has also demonstrated, via testimony by Dr. Drewes, that the selection of the meta-substituent is also critical for the para-cyano compounds. (*Id.*)

28. Andree urges that the unexpected results establish the patentability of the subject matter of its involved claims 1-4 and 6, and that the unexpected results redound to the patentability of the diazonium precursor claimed in claim 5.

(*Id.* at 16.)

29. Moreover, Andree argues that although Klintz mentions cyano compounds, Klintz "was oblivious to the significance of the para-cyano compounds having the proper meta-position substituent. If Klintz had knowledge (possession) of the markedly superior para-cyano compounds having the proper meta-position substituent, it is reasonable to expect that he would have disclosed and preferred such compounds." (*Id.* at 19.)

30. Andree argues further that Klintz's preference for para-chloro compounds, the only compounds exemplified in the Klintz disclosure, would have led skilled readers away from the para-cyano compounds. (*Id.*)

31. Andree states that Klintz is entitled to a patent having the generic claims: "even if the interference is terminated, Klintz remains entitled to its claims to the patentably distinct generic invention." (*Id.* at 20, second full paragraph, last sentence.)

32. According to Andree, *Bigham v. Godtfredsen*, 857 F.2d 1415, 1417-18, 8 USPQ2d 1266, 1268-69 (Fed. Cir. 1988) holds that when a subgenus is patentably distinct from the genus, "the description of the genus cannot serve as a written description for a subgenus or a species embraced by the genus, even if the genus is a limited one." (*Id.* at 21.)

33. Therefore, given the unexpected results established for its para-cyano, meta-substituted subgenus, Andree argues that Klintz's generic claims, i.e., claims 1-7, 12, 13, 15, 16, 26-30, 36, 37, 39, 40, and 43-51, are not described by the generic disclosure in the specification and are too broad to be drawn to the same patentable invention as Andree's involved claims 1-4 and 6. (*Id.*)

34. Andree argues that claims 53-56, which were "copied" to provoke the interference, lack an adequate written description. (*Id.* at 22.)

35. According to Andree, Klintz's involved application lacks any blaze marks highlighting the subject matter of these claims; in particular, there are no examples of a para-cyano

compound in any of the more than 150 exemplified chemical species. (*Id.*)

36. The only para-cyano compounds mentioned, according to Drewes, are in the form of a generic formula at the top of page 60. (*Id.*, citing the Drewes declaration, Ex. 2013, ¶13.)

37. According to Drewes, this generic formula fails to describe Andree's subgenus because it does not further limit the meta-substituents. "If a smaller number of meta-substituents were envisioned for the corresponding cyano compounds, this was not clearly disclosed in the Klintz application." (*Id.* at 23, citing the Drewes declaration, Ex. 2013, ¶18, bold italics omitted.)

38. With regard to Count 2, Andree makes a similar argument, urging that Klintz, while describing a genus of diazonium salts in which  $R^1$  = "halogen, cyano, nitro or trifluoromethyl," does not provide an adequate written description of the cyano-substituted diazonium salts claimed by Andree's claim 5. (*Id.* at 24-25.)

39. In particular, Andree urges that the demonstration that para-cyano is patentably distinct from  $R^1$  = chloro for the formula (I) class of compounds shows that the same is true for the diazonium salts, which are precursors of the formula (I) compounds. Thus, argues Andree, Klintz does not provide an adequate written description of the diazonium salts. (*Id.*)

Interpretation of Andree's motion

40. On April 24, 2003, an Order was issued authorizing Senior party Klintz to file an Opposition to Andree's Preliminary Motion 1. (Paper 28.)

a. That order characterized Andree's motion as seeking three determinations, namely:

(1) that Klintz is not entitled to a patent containing claims 53-55 for lack of an adequate written description of the "selection invention";

(2) that Klintz is not entitled to a patent containing claim 56 for lack of an adequate written description of the "selection invention"; and

(3) that there is no interference-in-fact between Klintz's claims 1-7, 12, 13, 15, 16, 26-30, 36, 37, 39, 40, and 43-51, and Andree's claims 1-4 and 6. Andree maintains that it has shown that its claimed subgenus of compounds exhibits unexpected results and is patentable over the genus of compounds claimed by Klintz.

(Paper 28 at 3-4.)

41. On May 23, 2003, Klintz timely filed a statement in response to the Order. (Paper 29.)

a. Klintz's substantive remarks were as follows:  
"Klintz agrees with Andree Preliminary Motion 1 in particular Andree's concession that 'even if the interference is terminated,

Klintz remains entitled to its claims to the patentably distinct generic invention." [Paper 29 at 2, record cite omitted.]

Discussion

Although Klintz has stated that it "agrees with Andree's preliminary motion 1," Klintz has neither expressly requested adverse judgment nor expressly conceded unpatentability of any of its claims corresponding to the count. Moreover, the patent statute expressly commits the determination of whether an interference exists to the Director of the United States Patent and Trademark Office. 35 U.S.C. § 135(a) ("Whenever an application is made for a patent which, in the opinion of the Director, would interfere . . . with any unexpired patent, an interference may be declared . . . "). Accordingly, we must consider Andree's motion on its merits.

Andree's argument starts from the premise that if it proves "unexpected results" for its claimed subject matter, it has proven patentable distinctness, and that Klintz's failure of written description then follows as a matter of law. In other words, Andree reasons that Klintz could not have described the subgenus compounds if it did not appreciate their (unexpected) properties compared to the general properties shared by the genus compounds.

Andree's argument is flawed because it overlooks the condition that if Klintz has an adequate written description of the subgenus compounds covered by claims 53-56, then those

claims, and indeed Klintz's generic claims, taken as prior art, anticipate the subgenus of compounds covered by Andree's involved claims. No showing of unexpected results can rebut a *prima facie* case of anticipation.

Nonetheless, Andree's motion, as interpreted *supra*, raises and supports the critical issues needed to obtain the relief Andree seeks as to each count.

The first critical issue is whether Andree has established a *prima facie* case that Klintz is not entitled to a patent containing claims 53-55 due to lack of an adequate written description. If so, then the presence of the subgenus of compounds covered by claims 53-55 within the genus of compounds recited in claim 1 cannot constitute an anticipation of Andree's involved claims that correspond to Count 1. *In re Malagari*, 499 F.2d 1297, 1302, 182 USPQ 549, 553 (CCPA 1974) (A proper rejection under § 102 cannot be overcome by a showing of unexpected results, which are relevant only to an obviousness rejection.) Then, taking Klintz's claim 1 as prior art, we must consider whether there is a *prima facie* case that the subgenus covered by Andree's involved claims is obvious. If we hold that a *prima facie* case of obviousness had not been established, or if we find that Andree has shown unexpected results sufficient to establish nonobviousness of its claimed subject matter, it would follow that the interference was improvidently declared as to Count 1. As no useful purpose would be served by prolonging the

proceeding as to Count 1, the interference would be terminated as to Count 1.

The next critical issue is whether Andree has established a *prima facie* case that Klintz lacks an adequate written description of the diazo-intermediate compounds covered by Klintz's claim 56. If Klintz lacks an adequate written description of those particular diazo compounds, it is not entitled to a claim to those compounds. Again, it would follow that the interference was improvidently declared as to Count 2, and the proceeding would be terminated, as no useful purpose would be served by prolonging the proceeding as to Count 2.

On the other hand, if Klintz has provided an adequate written description of the compounds covered by claims 53-56, Andree's claimed subject matter would be anticipated, and any evidence of unexpected results would be irrelevant. In that case, the interference would proceed with both counts.

In order to satisfy the written description requirement, the disclosure as originally filed does not have to provide *in haec verba* support of the claimed subject matter. *Purdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1323, 56 USPQ2d 1481, 1483 (Fed. Cir. 2000). Nonetheless, the disclosure must convey with reasonable clarity to any person skilled in the art that the inventor was in possession of the invention: *Id.* In other words, one skilled in the art, reading the original disclosure, must immediately discern the limitations at issue in the claims.



*Id.* The inquiry is factual and must be assessed on a case-by-case basis. *Id.* Put another way, there must be "guides" or "blaze marks" in the original disclosure that point towards the now-claimed invention. *Fujikawa v. Wattanasin*, 93 F.3d 1559, 1570, 39 USPQ2d 1895, 1905 (Fed. Cir. 1996) ("In the absence of such blaze marks, simply describing a large genus of compounds is not sufficient to satisfy the written description requirement as to particular species of sub-genuses."); *In re Ruschig*, 379 F.2d 990, 995, 154 USPQ 118, 122 (CCPA 1967).

Count 1, the genus and subgenus claims

*Written description of subgenus claims 53-55*

We begin our inquiry by comparing Klintz claim 53 with the disclosure in its national stage application, 08/211,067, which appears to be identical to its PCT application. The generic disclosure at page 1, l. 3 through page 6, l. 1, appears to be identical to original claim 1 at pages 140 through 145, l. 1. (Exhibit 2014.) For convenience, we refer principally to the original claims, which are attached to this decision as Appendix 1. Cf. *In re Koller*, 204 USPQ 702, 706 (CCPA 1980) ("original claims constitute their own description. Later added claims of similar scope and wording are described thereby" (citation omitted).)

Andree maintains that there are two critical substituents, the combination of which has not been adequately described. Andree has not argued that any of the other substituents are

material to the written description analysis, so we shall focus our consideration on the two substitutents argued to be critical.

The first critical substituent is the para-group, which Klintz labels  $R^1$ . Klintz, in original claim 1, describes a genus of compounds in which  $R^1$  is defined by halogen, cyano (-CN), nitro (-NO<sub>2</sub>), and trifluoromethyl (-CF<sub>3</sub>). (Exhibit 2014 at 143, line 28.) The disclosure of four similar substituents is a disclosure of a sufficiently small genus that we regard each of the four classes of compounds defined by the  $R^1$  substituents to be fully described. *In re Schaumann*, 572 F.2d 312, 316-17, 197 USPQ 5, 9 (CCPA 1978) ("a very limited number of compounds closely related to one another in structure . . . provides a description of those compounds just as surely as if they were identified in the reference by name.") We also find that claim 6, which depends on claim 1, limits  $R^1$  to chlorine or bromine, and that claim 19, which also depends on claim 1, covers processes of making compounds in which  $R^1$  is cyano. Thus, we find that the subgenus of 3-phenyluracils in which  $R^1$  is cyano is adequately described.

Andree, however, points out that the claimed compounds are limited by other substituents - in particular, by the "meta" substituent, which Klintz labels W. The definitions of W in

original claim 1 and in claim 53 are shown in parallel in the following table:

Klintz meta-Substituents (W)	
Original Claim 1	Claim 53
$-C(R^8)=X^5$	
$-C(R^8)(X^3R^9)(X^4R^7)$	
$-CH(R^8)-CH(R^9)-CO-R^{10}$	$-CH(R^8)-CH(R^9)-CO-R^{10}$
$-C(R^8)=C(R^9)-CO-R^{10}$	$-C(R^8)=C(R^9)-CO-R^{10}$
$-C(R^8)=C(R^9)-CN$	$-C(R^8)=C(R^9)-CN$
$-C(R^8)=C(R^9)-CH_2-CO-R^{10}$	
$-C(R^8)=C(R^9)-C(R^{11})=C(R^{12})-CO-R^{10}$	
$-C(R^8)=C(R^9)-CH_2-CH(R^9)-CO-R^{10}$	

Of the eight possible sets of W substituents listed in original claim 1, only three, which are either substituted ethyl or ethenyl groups, remain in claim 58. Furthermore, comparison of claim 53 and original claim 1 shows that the definitions of the substituents  $R^8$ ,  $R^9$ , and  $R^{10}$  in claim 53 constitute a very small subset of those recited in original claim 1. For example, in claim 53,  $R^8$  is limited to hydrogen or optionally fluorine-, chlorine-, or  $C_1$ - $C_4$ -alkoxy-substituted  $C_1$ - $C_4$ -alkyl while in original claim 1,  $R^8$  may be *hydrogen*, cyano,  $C_1$ - $C_6$ -alkyl,  $C_2$ - $C_6$ -alkenyl,  $C_2$ - $C_6$ -alkynyl,  $C_1$ - $C_6$ -haloalkyl,  $C_3$ - $C_7$ -cycloalkyl,  $C_1$ - $C_6$ -alkoxy- $C_1$ - $C_6$ -alkyl, or  $C_1$ - $C_6$ -alkoxycarbonyl. The italicized groups indicate the source of overlap with  $R^8$  in claim 53. The substituent  $R^9$  is also much more limited, and the substituent  $R^{10}$

is much much more limited in claim 53 than in original claim 1. None of the remaining original claims identify any particular W substituent in combination with  $R^1$  = cyano. We conclude that the original claims do not themselves disclose or suggest the particular subset of para-cyano, meta-substituent species claimed in claim 53 as a distinct set of compounds.

Moreover, the body of the specification does not appear to contain any suggestions for the combinations of substituents in single 3-phenyluracil compounds as recited in claim 53. The only specific discussion of the cyano group in the Klintz specification appears to be at pages 59-60, in a section entitled "Substitution of a halogen atom in the phenyl moiety of the substituted 3-phenyluracils I ( $R^1$  = halogen) by the cyano group." In that section, as pointed out by Dr. Drewes, an expert testifying on behalf of Andree, there is no further limitation or specific identification of meta (W) groups. (Andree preliminary motion 1 at 23, quoting Exhibit 2013, ¶18.) (These remarks apply equally to the disclosure provided by original claim 19, part c), discussed ante. Thus, the two disclosures are merely cumulative.)

Dr. Drewes also identifies disclosure at pages 36-38 of "particularly preferred" compounds (I-1 through I-24). (*Id.*) As Dr. Drewes observes, all of these compounds have  $R^1$  = chloro, -Cl, and all may have any of the W groups listed at pages 38-55 of the Klintz specification. (*Id.*) Although Dr. Drewes does not

break down the W groups to indicate how many fall within the various classes listed in the specification, in original claim 1, or in claim 53, casual inspection reveals that there are many proposed W groups in each of the identified classes. Similarly, we find that all 157 compounds reported synthesized in the "Active Substance" Tables 1-4 at pages 118-27 of the specification have  $R^1 = \text{chloro}$ . Although these compounds have a range of W groups, we find no indication which, if any, are preferred for combination with  $R^1 = \text{cyano}$ .

Klintz, although apprized of our interpretation of Andree's motion and the likely consequences of granting it, has failed to direct our attention to any evidence that would tend to contradict or weaken Andree's arguments. Thus, Klintz has effectively waived any and all opposition to Andree Preliminary Motion 1. Taken as a whole, we find no blaze marks in the original Klintz specification that would direct one skilled in the art to the subgenus of compounds covered by claims 53-55. We therefore find that Andree has established a *prima facie* case that the subgenus compounds covered by claims 53-55 are not adequately described in the original Klintz application, and we hold that Klintz is not entitled to a patent containing claims 53-55.

*No interference-in-fact between Klintz's genus claims and Andree's subgenus claims corresponding to Count 1*

We must now determine whether there is interfering subject matter between Klintz's remaining genus claims corresponding to Count 1, namely, claims 1-5, 7, 12, 13, 15, 16, 26-28, 30, 36, 37, 39, 40, 43, and 45-51, and Andree's claims 1-4 and 6. We have found that Klintz's disclosure contains no "blaze marks" or direction to those skilled in the art that would lead them to conclude that Klintz was "in possession" of that particular subgenus of compounds when its application was filed. Accordingly, it follows that Klintz's generic claims, taken as prior art, do not anticipate Andree's claims that correspond to Count 1. *Cf. In re Arkley*, 455 F.2d 586, 587, 172 USPQ 524, 526 (CCPA 1972) (for a proper anticipation rejection, the reference "must clearly and unequivocally disclose the claimed compound or direct those skilled in the art to the compound without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference.") Moreover, considering the astronomical size of the genus of compounds and the lack of guidance towards selecting the relatively small subgenus claimed by Andree, we find that there is no motivation to pick and choose amongst the myriad possibilities to arrive at the subgenus. Thus, we hold that there is no *prima facie* case of obviousness of any of Andree's claims currently denominated as corresponding to Count 1.

Acting on behalf of the Director of the USPTO, we conclude that this interference was improvidently declared as to Count 1, and that there is no interference-in-fact between any of the claims of Klintz currently designated as corresponding to Count 1 and any of the claims of Andree currently designated as corresponding to Count 1.

Count 2 (Written description of Claim 56)

Claim 56 is drawn to diazonium salts of compound I in which the para-substituent is cyano and the meta-substituent is a diazonium salt,  $(-N=N)^+X^x$ , where  $X^x$  is halogen. (The superscript "x" serves to distinguish the meta-moiety from the carbonyl moieties represented by  $X^1$  and  $X^2$ ; it does not denote the magnitude of the negative charge.) There are no Klintz original claims directed to diazonium salts. The sole disclosure appears to be at page 73, in a section entitled "Meerwein alkylation of a diazonium salt IXb." The meta-substituent in IXb is  $N_2^+$ .

Andree argues that there is no adequate written description for the subject matter of claim 56 because diazonium salt compounds are described solely in terms of the

original broad genus, i.e.,  $R^1$  = 'halogen, cyano, nitro or trifluoromethyl,' and is not limited to cyano, in particular. However, inasmuch as Andree has demonstrated that para-cyano confers an unexpected benefit, Klintz's claim 56 cannot be described by this disclosure. Klintz's involved application does not discuss diazonium salts at any other point and, consequently, Klintz could not make a proper claim to the same patentable invention as Andree's claim 5.

(Andree preliminary motion 1 at 24.)

We disagree. As noted ante, the disclosure of a small genus of similar compounds can be a disclosure of each member of the small genus. *Schaumann*, 572 F.2d at 316-17, 197 USPQ at 9. In the present case, we have found, with respect to the genus of compounds covered by Count 1, that each of the four classes of compounds, wherein R<sup>1</sup> is halogen, cyano, nitro or trifluoromethyl, is adequately disclosed. The considerably smaller classes of meta-substituted diazonium salt compounds are similarly described.

However, the diazonium salts covered by claim 56 are limited by remaining recited substituents:

X<sup>1</sup> and X<sup>2</sup> are oxygen;

R<sup>5</sup> represents hydrogen, fluorine, chlorine, bromine or optionally fluorine- and/or chlorine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl;

R<sup>4</sup> represents optionally fluorine- and/or chlorine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl;

R<sup>3</sup> represents hydrogen, amino, optionally cyano-, chlorine-, or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, or represents C<sub>3</sub>-C<sub>6</sub>-alkylenyl or C<sub>3</sub>-C<sub>6</sub>-alkynyl; and

R<sup>2</sup> represents hydrogen, fluorine or chlorine.

We have not found any suggestions or blaze marks in the original disclosure that the particular combination of substituents recited in claim 56 are worthy of special interest. Nor has Klintz directed our attention to any disclosure that would lead the artisan to such combinations. We conclude that Klintz has not provided an adequate written description for the subgenus of



compounds covered by claim 56, and that Klintz is therefore not entitled to a claim limited to those species. Consequently, acting on behalf of the Director of the United States Patent and Trademark Office, we hold that the interference as to Count 2 was declared improvidently, and that there is no interference-in-fact as to the subject matter of Count 2.

Order

In consideration of the foregoing findings of facts and considerations, it is:

ORDERED that Andree's motion for judgment based on no interference-in-fact is GRANTED;



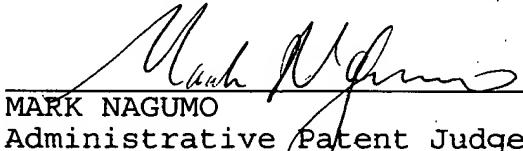
FURTHER ORDERED that there is no interference-in-fact between any of Klintz's claims 1-7, 12, 13, 15, 16, 26-30, 36, 37, 39, 40, 43-51, 53-55 of application 09/733,554 and any of Andree's claims 1-4 and 6 of U.S. Patent 6,251,828, which correspond to Count 1;

FURTHER ORDERED that there is no interference-in-fact between Klintz's claim 56 of application 09/733,554 and Andree's claims 5 of U.S. Patent 6,251,828, which correspond to Count 2;

FURTHER ORDERED that Ralf Klintz, Peter Schaefer, Gerhard Hamprecht, Elisabeth Heistracher, Hans-Josef Wolf, Karl-Otto Westphalen, Matthias Gerber, Uwe Kardorff, Helmut Walter, and Klaus Grossmann, jointly and severally, are not entitled to a patent containing claims 53-56 of application 09/733,554;

FURTHER ORDERED that any request for reconsideration be  
filed within one month from the date of this judgment; and

FURTHER ORDERED that a copy of this decision be entered in  
the administrative record of Andree's 6,251,828 patent and of  
Klintz's 09/733,554 application.

  
RICHARD E. SCHAFER  
Administrative Patent Judge )  
)  
  
MICHAEL P. TIERNEY  
Administrative Patent Judge )  
)  
  
MARK NAGUMO  
Administrative Patent Judge )  
)

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INTERFERENCE  
TRIAL SECTION

Interference 105,039  
cc' (via facsimile and first class mail):

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